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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/332,063	06/14/1999	LARS HOLMGREN	3362-0101P	2465

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EXAMINER
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HARRIS, ALANA M

ART UNIT	PAPER NUMBER
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1642

DATE MAILED: 12/13/2002

24

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/332,063

Applicant(s)

HOLMGREN ET AL.

Examiner

Alana M. Harris, Ph.D.

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1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-33 and 35-38 is/are pending in the application.
- 4a) Of the above claim(s) 26-29,36 and 37 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 is/are allowed.
- 6) ☒ Claim(s) 1, 3-6, 30-33, 35 and 38 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 27, 2002 has been entered.

2. Claims 1, 3-33 and 35-38 are pending.

Claims 7 and 38 have been amended.

Claim 34 has been canceled.

Claims 26-29, 36 and 37, drawn to non-elected inventions are withdrawn from examination.

Claims 1, 3-8, 30-33, 35 and 38 are examined on the merits.

### ***Response to Applicants' Inquiry***

3. In paper number 23, received September 27, 2002 inquired about the status of claim 35 given this claim was inadvertently absent from the Office Action Summary page that accompanied the final rejection mailed October 2, 2001 as paper number 19. However, the final rejection office action did set forth in paper number 19, page 6, paragraph 9 stated that claim 35 was objected.

***Withdrawn Rejections***

***Claim Rejections - 35 U.S.C. § 112***

4. The rejection of claims 1, 3-6 and 30-33 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention is withdrawn in light of Applicants' arguments.

***Claim Rejections - 35 U.S.C. § 102***

5. The rejection of claim 7 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 5,916,572 (filed November 14, 1995) is withdrawn in light of Applicants' amendment to the claim.

6. The rejection of claim 34 under 35 U.S.C. 102(b) as being anticipated by Petersen et al. (Journal of Biological Chemistry 205(11):6104-6111, 1990) is withdrawn in view that the claim has been cancelled.

***Claim Rejections - 35 U.S.C. § 103***

7. The rejection of claim 38 under 35 U.S.C. 103(a) as being unpatentable Petersen et al. (Journal of Biological Chemistry 205(11):6104-6111, 1990), in view of U.S. Patent # 5,679,350 (filed May 8, 1996) is withdrawn. Claim 34 has been cancelled.

***New Grounds of Objection and Rejection***

***Claim Objections***

8. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of claim 7. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1, 3-6, 30-33, 35 and 38 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for Big-3 (SEQ ID NO: 4), a recombinant fragment of ABP-1 (SEQ ID NO: 2), an isolated human protein having anti-angiogenic activity and a receptor for a N-terminal fragment of plasminogen comprising human angiostatin (kringle domains 1-4) and plasminogen (kringles 1-5), does not reasonably provide enablement for any isolated human protein or fragment of ABP-1 which is capable of functioning as an anti-angiogenic molecule and a receptor for a N-terminal fragment of plasminogen comprising kringle 5. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

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Applicants have provided disclosure which supports that Big-3, namely SEQ ID NO: 4 binds kringles 1-4 and kringles 1-5, see page 12, line 7- page 13, line 7; page 14, line 18- page 15, line 7; and page 19, line 22- page 20, line 8. The broadly claimed invention, specifically claim 1 encompasses a plethora of proteins capable of exhibiting anti-angiogenic activity and as a kringle receptor. The claim also implies that ABP-1 (SEQ ID NO: 2) and its variants and fragments other than Big-3 are capable of exhibiting the said activities, see page 2, lines 25-28. However, Applicants' specification does not support the use of undefined fragments of SEQ ID NO: 2 in the manner suggested. There is insufficient teachings in the specification that suggest that proteins or fragments other than Big-3 are able to exhibit anti-angiogenic activity and capable of serving as a receptor for N-terminal fragments of plasminogen. Furthermore, the distinct kringles in which Big-3 bind or acts as a receptor for are only human kringle domains 1-4 and kringle domain 1-5 (only when treated with dithiothreitol (DTT)). Consequently, Applicants are not enabled for the breadth of their claims, which includes unidentified fragments and variants of ABP-1 (SEQ ID NO: 2), as well as a plethora of isolated human proteins and fragments having anti-angiogenic activity and is a receptor for a N-terminal fragment of plasminogen comprising kringle domain 5 wherein said protein does not cleave plasminogen kringle domains.

11. Claims 1, 3-8, 30-33, 35 and 38 are free of the art.

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***Allowable Subject Matter***

12. Claim 7 is allowed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alana M. Harris, Ph.D. whose telephone number is (703) 306-5880. The examiner can normally be reached on 6:30 am to 4:00 pm, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, Ph.D. can be reached on (703) 308-3995. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4315 for regular communications and (703) 308-4315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

**ALANA HARRIS  
PATENT EXAMINER**



Alana M. Harris, Ph.D.  
December 12, 2002